ABSTRACT OF THE DISCLOSURE

ATM TRAFFIC HAVING UNKNOWN CHARACTERISTICS INCLUDING
TRAFFIC WITH WEIGHTED PRIORITIES AND TRAFFIC
WITHOUT WEIGHTED PRIORITIES

An ATM communication system. The system includes a source which produces traffic for connections having known traffic characteristics and unknown traffic characteristics. The traffic has unknown characteristics including traffic with weighted priorities and traffic without weighted priorities. The system includes a network on which traffic travels. The source is connected to the network. The source sends the traffic having known traffic characteristics and unknown traffic characteristics onto the network. The system includes a destination which is connected to the network and receives the traffic having known traffic characteristics and unknown traffic characteristics. A source for producing ATM traffic for a network with switches. The source includes a mechanism which produces traffic for connections having unknown traffic characteristics. The traffic includes traffic with weighted priorities and traffic without weighted priorities. The source includes a mechanism for transmitting the traffic to the network. A switch for switching traffic on an ATM network from a source to a destination. The switch includes a mechanism for receiving traffic for connections having unknown traffic characteristics. The traffic includes traffic with weighted priorities and traffic without weighted priorities. The switch includes a mechanism for transmitting the traffic for connections

to the network. The transmitting mechanism is connected to the receiving mechanism. The switch includes a scheduler for scheduling when the connections having traffic with unknown characteristics having weighted priorities are to be transmitted to the network. The scheduler is connected to the transmitting mechanism and the receiving mechanism. A method for transferring traffic in an ATM communication system. The method includes the steps of transmitting from a source traffic of a connection having unknown traffic characteristics with a weighted priority onto an ATM network. Then there is the step of transmitting from the source traffic of another connection having unknown traffic characteristics without a weighted priority onto the ATM network.